

AMENDMENTS TO THE CLAIMS

Claims 1- 55 (canceled).

56. (New) A method of recording an identity of a memory device comprising:
applying a programming voltage between a respective drain and gate of a transistor disposed within said memory device, and said transistor having a gate threshold adapted to transition from a first value to a second value in response to said programming voltage, whereby said first value corresponds to a first identity and said second value corresponds to a second identity.

57. (New) A method of reading an identity of a memory device comprising:

applying a read voltage to a gate of a transistor having a programmed gate threshold voltage for a time interval, said transistor disposed within said memory device;

reading a conductivity state of said transistor during said time interval; and

perceiving an identity of said memory device according to said conductivity state.

58. (New) A method of remapping a defective memory cell address comprising:

applying a programming voltage between a gate and a source of a programmable transistor and thereby changing a gate threshold of said transistor to correspond to a programmed state;

applying a read signal voltage to said gate of said transistor, causing said transistor to output a signal corresponding to said programmed state;

communicating said output signal of said transistor to an input of an address decoder; and

changing an output of said address decoder in response to said communicated signal so as to select a non-defective memory cell.

59. (New) The method of claim 56, wherein said applied programming voltage is approximately 6V.

60. (New) The method of claim 56, wherein said applying a programming voltage comprises application of a voltage source for approximately five seconds.

61. (New) The method of claim 56, wherein said first value corresponds to a normal threshold voltage for said transistor.

62. (New) The method of claim 61, wherein said second value is higher than said first value.

63. (New) The method of claim 56, wherein said first value is approximately .7V and said second value is approximately 1.5V.

64. (New) The method of claim 56, wherein said first identity corresponds to said gate being in an “on” state and said second identity corresponds to said transistor being in an “off” state.

65. (New) The method of claim 56, wherein the step of applying a programming voltage between a respective drain and gate of a transistor comprises applying one pre-determined voltage value to said gate and applying a second pre-determined voltage value to said drain.

66. (New) The method of claim 65, wherein said first pre-determined voltage value is applied via a first signal line and said second pre-determined voltage value is applied via a second signal line.

67. (New) The method of claim 66, wherein said first pre-determined voltage value is approximately 6V, and said second pre-determined voltage value is approximately 4.5V.

68. (New) The method of claim 56 further comprising the steps of:

generating a response current at said transistor in response to said applied programming voltage; and

applying said response current to a latching circuit so as to record the identity of said transistor.

69. (New) The method of claim 57, further comprising grounding a source of said transistor.

70. (New) The method of claim 69, wherein said step of grounding said source of said transistor is performed simultaneously with the step of applying a read voltage to said gate.

71. (New) The method of claim 57, wherein the step of reading a conductivity state of said transistor comprises determining the state of an associated output node.

72. (New) The method of claim 57, wherein said applied read voltage is greater than the normal threshold voltage value of said transistor.

73. (New) The method of claim 57, wherein said applied read voltage is between two possible threshold voltage values for said transistor.